

Application No.: 10/699333
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REMARKS

Rejections under 35 U.S.C. § 102

Claims 1-4, 6, 10-13 and 17-19 stand rejected under 35 U.S.C. § 102(b) as anticipated by US 4,444,817 (Subramanian). The examiner states that Subramanian "discloses the recited pipe, sheet, or tube." However, Subramanian does not disclose pipes and liners as claimed in the present invention. Furthermore, no mention is made in Subramanian of flexible pipes, line pipes, or down-hole casing liners, as claimed in claims 17-19. The examiner states that "the pipe can be a flexible pipe as such is inherent to the materials used," without providing any support for this assumption. The claims of the present invention are believed to be novel over Subramanian.

Rejections under 35 U.S.C. § 103

Claims 5, 8, and 9 stand rejected under 35 U.S.C. § 103(a) as obvious over Subramanian in view of US 5,712,043 (Chen). However, Subramanian does not disclose pipes and liners as claimed in the present invention, and thus one skilled in the art would have been unable to combine the additives of Chen with the laminar article of Subramanian to arrive at the present invention.

Claim 7 stands rejected under 35 U.S.C. § 103(a) as obvious over Subramanian in view of US 4,950,513 (Mehra). However, Subramanian does not disclose pipes and liners as claimed in the present invention, and thus one skilled in the art would have been unable to combine the plasticizer of Mehra with the laminar article of Subramanian to arrive at the present invention.

Claims 14-16 stand rejected under 35 U.S.C. § 103(a) as obvious over Subramanian in view of US 5,641,833 (Jung). The examiner states that:

Jung discloses a similar material made up of layers of polyamide dispersed in a polyolefin matrix where the polyolefins used can be normal polyolefins or cross linked polyolefins such as polyethylene, where the use of silane is old and well known in the art as a cross linking agent and a obvious choice of mechanical expedients. It would have been obvious to one skilled in the art to modify the polyolefin in Subramanian to be formed of a cross linked polyolefin such as polyethylene where the use of silane is an obvious choice of mechanical expedients, and as such is an

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equivalent form of polyolefin used to form such materials as suggested by Jung where such would provide for better adherence of the polyamide to the polyolefin thereby improving quality and preventing failure thereby saving money.

Jung discloses a process for preparing a polyolefinic blend for film comprising blending a polyolefin and an alkylcarboxyl-substituted polyolefin with a polymer that is incompatible with the polyolefin and that has been melt-coated with a reactive low molecular weight component. The reactive low molecular weight component consists essentially of a polar compound having functional groups reactive with the polymer and an initiator capable of initiating the reaction of the polyolefin with the polar compound. [Claim 1].

Examples of initiators used by Jung include peroxides and azo compounds [col. 4, line 58 to col. 5, line 3]. No mention is made in Jung of the use of silane compounds, as is claimed in claim 14 of the present application.

The initiator of Jung is used to cause "a chemical reaction between the polyolefin and the polar compound" [col. 4, lines 44-45], not to cross-link the polyolefin. Jung does not disclose the use of cross-linked polyolefins in the process. In fact, Jung *teaches against* the use of cross-linked polyolefins:

If the initiator of the reactive low molecular weight components is over 0.01% by weight, there is a large amount of cross-linking in the polyolefin phase. This makes stretch extruding processing, such as blow molding or cast extrusion, difficult or the mechanical properties may decrease. On the other hand, if the initiator is present in an amount below 0.0001% by weight, there is insufficient initiation reaction between the polar compound and the polyolefin. [Col. 5, lines 56-64]

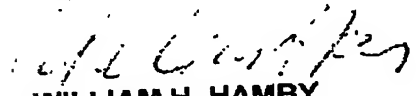
Subramanian does not disclose pipes and liners as claimed in the present invention and Jung does not disclose the use of cross-linked polyolefins, and thus one skilled in the art would have been unable to combine the teachings of Jung with the laminar article of Subramanian to arrive at the present invention. Furthermore, since the disclosure of Jung not only does not describe the use of cross-linked polyolefins, but in fact teaches away from using such, one skilled in the art would not only have had no motivation to combine the teachings of Jung with the articles of Subramanian, but one would have been *dissuaded* by Jung from doing so.

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In view of the foregoing, allowance of the above-referenced application is respectfully requested.

Respectfully submitted,


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